

We claim:

1. A nucleic acid vector for the expression of at least two cistrons comprising:
  - a. a promoter operably linked to a nucleotide sequence comprising at least two cistrons; and
  - b. at least one nucleotide sequence comprising SEQ ID NO. 1, or a variant or fragment thereof operably linked to at least one of said at least two cistrons, wherein said nucleotide sequence comprising SEQ ID NO. 1, or variant or fragment thereof, provides IRES activity.
2. The nucleic acid vector of claim 1, wherein at least one of said at least two cistrons comprises a reporter gene.
3. The nucleic acid vector of claim 1, wherein at least one of said at least two cistrons comprises a therapeutic gene.
4. A biological vector capable of expressing at least two cistrons comprising the nucleic acid vector of claim 1.
5. The biological vector of claim 4, wherein said biological vector is selected from poxvirus, adenovirus, herpesvirus, adeno-associated virus, retrovirus, and baculovirus.
6. A nucleic acid vector for the expression of at least two cistrons comprising:
  - a. a promoter operably linked to a nucleotide sequence comprising at least two cistrons; and

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- b. at least one nucleotide sequence comprising a homolog of SEQ ID NO. 1, or a variant or fragment thereof, operably linked to at least one of said at least two cistrons, wherein said homolog of SEQ ID NO. 1, or variant or fragment thereof, provides IRES activity.
- 7. The nucleic acid vector of claim 6, wherein said homolog of SEQ ID NO. 1, comprises SEQ ID NO. 2.
- 8. The nucleic acid vector of claim 6, wherein at least one of said at least two cistrons comprises a reporter gene.
- 9. The nucleic acid vector of claim 6, wherein at least one of said at least two cistrons comprises a therapeutic gene.
- 10. A biological vector capable of expressing said at least two cistrons comprising the nucleic acid vector of claim 6.
- 11. The biological vector of claim 10, wherein said biological vector is selected from poxvirus, adenovirus, herpesvirus, adeno-associated virus, retrovirus, and baculovirus.
- 12. A host cell comprising the nucleic acid vector of claim 1.
- 13. The host cell of claim 12, wherein said host cell is an insect cell.
- 14. The host cell of claim 13, wherein said insect cell is a Drosophila cell.
- 15. A host cell comprising the nucleic acid vector of claim 6.

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16. The host cell of claim 15, wherein said host cell is a mammalian cell.
17. A method for expressing at least two cistrons comprising: introducing into a host cell: a nucleic acid vector comprising
  - a. a promoter operably linked to a nucleotide sequence comprising at least two cistrons; and
  - b. at least one nucleotide sequence comprising SEQ ID NO. 1, or a variant or fragment thereof operably linked to at least one of said at least two cistrons, wherein said nucleotide sequence comprising SEQ ID NO. 1, or variant or fragment thereof, provides IRES activity.
18. A method for expressing at least two cistrons comprising introducing into a host cell: a nucleic acid vector comprising
  - a. a promoter operably linked to a nucleotide sequence comprising at least two cistrons; and
  - b. at least one nucleotide sequence comprising a homolog of SEQ ID NO. 1, or a variant or fragment thereof operably linked to at least one of said at least two cistrons, wherein said homolog of SEQ ID NO. 1, or variant or fragment thereof provides IRES activity.
19. The method of claim 18, wherein said homolog of SEQ ID NO. 1 comprises SEQ ID NO. 2.
20. A baculovirus transfer vector for the expression of at least two cistrons comprising:

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- a. a polyhedrin promoter operably linked to a nucleotide sequence comprising at least two cistrons; and
  - b. at least one nucleotide sequence comprising SEQ ID NO. 1, or a variant or fragment thereof, operably linked to at least one of said at least two cistrons, wherein said nucleotide sequence comprising SEQ ID NO. 1, or variant or fragment thereof provides IRES activity.
21. The baculovirus transfer vector of claim 20, wherein at least one of at least two cistrons comprises a reporter gene.
22. The baculovirus transfer vector of claim 20, wherein at least one of at least two cistrons comprises a therapeutic gene.
23. A recombinant baculovirus capable of expressing at least two cistrons in a host cell comprising a baculovirus genome comprising:
- a. a polyhedrin promoter operably linked to a nucleotide sequence comprising at least two cistrons; and
  - b. at least one nucleotide sequence comprising SEQ ID NO. 1, or a variant or fragment thereof operably linked to at least one of said at least two cistrons, wherein said nucleotide sequence comprising SEQ ID NO. 1, or homolog, variant or fragment thereof, provides IRES activity.
24. A method for producing a recombinant baculovirus capable of expressing at least two cistrons comprising:

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- a. introducing a baculovirus transfer vector of claim 20 and a baculovirus genomic DNA into a baculovirus host cell so as to effect homologous recombination; and
  - b. isolating a recombinant baculovirus.
25. The method of claim 24, wherein said recombinant baculovirus is isolated by selecting plaques expressing at least one of said at least two cistrons.
26. A baculovirus host cell expressing at least two cistrons comprising the recombinant baculovirus of claim 23.
27. A baculovirus transfer vector for the expression of at least two cistrons comprising:
  - a. a polyhedrin promoter operably linked to a nucleotide sequence comprising at least two cistrons; and
  - b. at least one nucleotide sequence comprising a homolog of SEQ ID NO. 1, or a variant or fragment thereof, operably linked to at least one of said at least two cistrons, wherein said homolog, or variant or fragment thereof provides IRES activity.
28. The baculovirus transfer vector of claim 27, wherein said homolog comprises SEQ ID NO.2.
29. The baculovirus transfer vector of claim 27, wherein at least one of at least two cistrons comprises a reporter gene.
30. The baculovirus transfer vector of claim 27, wherein at least one of at least two cistrons comprises a therapeutic gene.

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31. A recombinant baculovirus capable of expressing at least two cistrons in a host cell comprising a baculovirus genome comprising:
  - a. a polyhedrin promoter operably linked to a nucleotide sequence comprising at least two cistrons; and
  - b. at least one nucleotide sequence comprising a homolog of SEQ ID NO. 1, or a variant or fragment thereof operably linked to at least one of said at least two cistrons, wherein said homolog, or variant or fragment thereof, provides IRES activity.
32. The recombinant baculovirus of claim 31, wherein said homolog comprises SEQ ID NO. 2.
33. A method for producing a recombinant baculovirus capable of expressing at least two cistrons comprising:
  - a. introducing a baculovirus transfer vector of claim 27 and a baculovirus genomic DNA into a baculovirus host cell so as to effect homologous recombination; and
  - b. isolating a recombinant baculovirus.
34. The method of claim 33, wherein said recombinant baculovirus is isolated by selecting plaques expressing at least one of said at least two cistrons.
35. A baculovirus host cell expressing at least two cistrons comprising the recombinant baculovirus of claim 31.

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36. A method of treating a patient comprising administering the nucleic acid vector of claim 1 or 6.
37. A method of treating a patient comprising administering the biological vector of claim 4 or 10.
38. A method of treating a patient comprising:
  - a. excising a cell or tissue from said patient;
  - b. introducing the nucleic acid vector of claim 1 or 6 into said excised cell or tissue;  
and
  - c. reimplanting said cell or tissue into said patient.
39. A method of treating a patient comprising:
  - a. excising a cell or tissue from said patient;
  - b. introducing the biological vector of claim 4 or 10 into said excised cell or tissue;  
and
  - c. reimplanting said cell or tissue into said patient.

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